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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,157	01/19/2006	Wittich Kaule	2732-173	7236
6449 7590 12/05/2008 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
EXAMINER CALLAWAY, JADE R				
ART UNIT 2872		PAPER NUMBER		
NOTIFICATION DATE 12/05/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

### Office Action Summary

**Application No.**

10/565,157

**Applicant(s)**

KAULE ET AL.

**Examiner**

JADE CALLAWAY

**Art Unit**

2872

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 9-12, 39, 48, 59, 62, 63 and 76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-12, 39, 48, 59, 62, 63 and 76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-849)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendments to the abstract and claims, in the submission dated 11/7/08, are acknowledged and accepted.

### ***Response to Arguments***

2. Applicant's arguments filed 11/7/08 have been fully considered but they are not persuasive. Applicants argue that the prior art cited does not teach "a diffraction structure embossed with an embossing die" or "at least one subarea is embossed with an embossing die." The Examiner respectfully disagrees. Menz et al. teach a dual-channel hologram that comprises a diffraction structure that is embossed (1, embossed hologram recording material). Official Notice is taken. Although the Menz et al. do not specifically disclose that the embossed element is embossed with an embossing die it is well known in the art that embossing dies are used for embossing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an embossing die to emboss an element so that the pattern in the hologram can be uniformly embossed as many times as desired. Further, Menz et al. teach a subarea that is embossed with an embossing die. As explained in Menz et al. in relation to figure 3, the dual-channel hologram structure is formed from a first embossed hologram structure with first subareas and a second embossed hologram structure with second subareas. The second embossed hologram structure can be further etched to form transparent portions on the hologram structure. The second embossed hologram structure, acting as a die, can be then embossed on to the first embossed hologram

structure. As such, at least one subarea (i.e. at least one portion of region 21) is embossed with an embossing die, to form the dual-channel hologram structure.

Applicants also argue that “the amended claims essentially relate to the fact that...the embossing mold is accordingly modified in the respective subarea. The at least one sub area according to the amended claims can, thus, not exhibit any individual information to be applied subsequently but only an information predetermined by the respective embossing die, which is identical for all embossed holograms.” In response to applicant’s argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., that the mold is accordingly modified in the respective subareas and that the subarea does not exhibit any information applied after embossing) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3, 9 and 76 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 13 of U.S. Patent No. 6,876,472. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Consider claims 1 and 76, the Menz et al. patent ('472) teaches a security element, which has at least one area with an embossed diffraction structure, which under specific viewing conditions reconstructs a diffractive image, wherein the area has subareas, which do not take part in the reconstruction of the diffractive image, and which represent a recognizable information, wherein that the information represented by the subareas is recognizable substantially only under the specific viewing conditions and at least one embossed subarea [claims 1 and 6]. Official Notice is taken. Although the Menz et al. patent ('472) does not specifically disclose that the embossed element is embossed with an embossing die it is well known in the art that embossing dies are used for embossing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an embossing die to emboss an element so that the pattern in the hologram can be uniformly embossed as many times as desired.

Consider claim 2, the Menz et al. patent ('472) teaches a security element characterized in that the area has a first reflection layer, which supports the reconstruction of the diffractive image [claim 13].

Consider claim 3, the Menz et al. patent ('472) teaches a security element characterized in that the subareas have no diffraction structure, and that the first reflection layer is disposed in both the area of the diffraction structure and the area of the subareas [claims 1 and 13].

Consider claim 9, the Menz et al. patent ('472) teaches a security element, which has at least one area with an embossed diffraction structure, which under specific viewing conditions reconstructs a diffractive image, wherein the area has subareas, which do not take part in the reconstruction of the diffractive image, and which represent a recognizable information, characterized in that the information represented by the subareas is recognizable under specific viewing conditions differing from the specific viewing conditions of the diffractive image and at least one subarea is embossed [claims 1 and 6]. Official Notice is taken. Although the Menz et al. patent ('472) does not specifically disclose that the embossed element is embossed with an embossing die it is well known in the art that embossing dies are used for embossing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an embossing die to emboss an element so that the pattern in the hologram can be uniformly embossed as many times as desired.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 9, 39, 48 and 76 are rejected under 35 U.S.C. 102(b) as being anticipated by Menz et al. (2002/0044313).

Consider claims 1, 9 and 76, Menz et al. teach (e.g. figures 1-3) a security element, which has at least one area with an embossed diffraction structure (1, embossed hologram recording material ), which under specific viewing conditions reconstructs a diffractive image (region 21), wherein the area has subareas (region 22), which do not take part in the reconstruction of the diffractive image, and which represent a recognizable information, characterized in that the information represented by the subareas is recognizable substantially only under viewing conditions differing from the specific viewing conditions of the diffractive image and at least one subarea is embossed with an embossing die (at least a portion of region 21) [0010-0011, 0015, 0045-0050, 0075-0077, 0091-0094]. Official Notice is taken. Although the Menz et al. do not specifically disclose that the embossed element is embossed with an embossing die it is well known in the art that embossing dies are used for embossing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an embossing die to emboss an element so that the pattern in the hologram can be uniformly embossed as many times as desired.

Consider claim 2, Menz et al. teach (e.g. figures 1-3) a security element characterized in that the area (1, hologram recording material) has a first reflection layer (metallized coating), which supports the reconstruction of the diffractive image [0091].

Consider claim 3, Menz et al. teach (e.g. figures 1-3) a security element characterized in that the subareas have no diffractive structure, and that the first reflection layer is disposed in both the area of the diffraction structure and the area of the subareas [0010-0011, 0015, 0075-0077, 0091].

Consider claim 39, Menz et al. teach (e.g. figures 1-3) a method for producing a security element with the following procedure steps: a) producing at least one area with a diffractive structure (region 21), which under specific viewing conditions reconstructs a diffractive image, b) producing sub areas (regions 22) which do not take part in the reconstruction of the diffractive image, and which represent a recognizable information, wherein the subareas are integrated in the area with the diffraction structure such that the information represented by the subareas is recognizable mainly only under the specific viewing conditions of the diffractive image and c) embossing at least one subarea (at least a portion of region 21) with an embossing die [0010-0011, 0015, 0045-0050, 0070-0077, 0091-0094]. Official Notice is taken. Although the Menz et al. do not specifically disclose that the embossed element is embossed with an embossing die it is well known in the art that embossing dies are used for embossing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an embossing die to emboss an element so that the pattern in the hologram can be uniformly embossed as many times as desired.



Consider claim 48, Menz et al. teach (e.g. figures 1-3) a method for producing a security element, with the following procedure steps: a) producing at least one area with a diffraction structure (region 21), which under specific viewing conditions reconstructs a diffractive image, b) producing subareas, which do not take part in the reconstruction of the diffractive image, and which represent a recognizable information, wherein the subareas are integrated in the area with the diffraction structure such that the information represented by the subareas is recognizable under viewing conditions differing from the specific viewing conditions of the diffractive image and c) embossing at least one subarea (at least a portion of region 21) with an embossing die [0010-0011, 0015, 0045-0050, 0070-0077, 0090-0094]. Official Notice is taken. Although the Menz et al. do not specifically disclose that the embossed element is embossed with an embossing die it is well known in the art that embossing dies are used for embossing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an embossing die to emboss an element so that the pattern in the hologram can be uniformly embossed as many times as desired.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-5, 10-12, 59, 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menz et al. (2002/0044313) in view of Ishimoto et al. (2002/0191234).

Consider claim 4 and 10, Menz et al. disclose a security element wherein the subareas are formed by gaps in the first reflection layer (the hologram structure with subareas 21 and 22 can be a reflection type hologram) [0023]. However, Menz et al. do not disclose a security element characterized in that the area has a transparent plastic layer, in which the diffraction structure is present in the form of a relief structure, that the first reflection layer is disposed on the surface of the plastic layer which is provided with the diffraction structure, and that the opposite surface of the plastic layer has a second reflection layer. Menz et al. and Ishimoto et al. are related as security element devices. Ishimoto et al. teaches (e.g. figure 2b) a security element characterized in that the area has a transparent plastic layer (17, pressure sensitive adhesive layer), in which the diffraction structure is present in the form of a relief structure (12, relief layer), that the first reflection layer (materials of layer 11) is disposed on the surface of the plastic layer which is provided with the diffraction structure (11, volume hologram), and that the opposite surface of the plastic layer has a second reflection layer (metal films of 12) [0022-0024, 0029, 0038, 0042]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Menz et al., as taught by Ishimoto et al., in order to protect the holograms to increase durability.

Consider claim 5, the modified Menz et al. reference discloses (e.g. figures 1-3 of Menz et al.) a security element characterized in that the first and second reflection

layers are made of materials having substantially the same reflecting properties (Note: Ag can be used for both hologram layers, 11 and 12 of Menz et al.; as such they would have substantially the same reflecting properties) [0029, 0038 of Menz et al.].

Consider claims 11 and 62, the modified Menz et al. reference discloses a security element characterized in that the opposite surface of the plastic layer has a second reflection layer (metal films of 12), wherein the first and second reflection layers are made of differently-colored materials (Note: the holograms can be colored) [0024-0025 of Menz et al., and 0022-0024 of Ishimoto et al.].

Consider claim 12, the modified Menz et al. reference discloses (e.g. figure 2b of Ishimoto et al.) a security element characterized in that the area is disposed on a transparent carrier (18, protective layer), so that the information represented by the subareas is recognizable in transmitted light [0022-0024 of Ishimoto et al.].

Consider claim 59 and 63, the modified Menz et al. reference discloses a security element wherein the materials are substantially the same material (both have a composition of Ag) [0029, 0038 of Ishimoto et al.]. However, the modified Menz et al. reference does not disclose that the material is the same and is made of one of aluminum, copper or gold. Note that the Court has held that the selection of a known material based on its suitability for its intended use supports a prima facie obviousness determination; see **Sinclair & Carroll Co. v. Interchemical Corp.**, 325 U.S. 327, 65 USPQ 297 (1945). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of the modified Menz et al. reference in order to create the same viewing characteristics from each hologram so

that they have the same brightness such that one hologram is not more noticeable than the other depending on viewing angle.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JADE CALLAWAY** whose telephone number is (571)272-8199. The examiner can normally be reached on Monday to Friday 7:00 am - 4:30 pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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